UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,068	03/01/2002	Torsten Grust	SVL920010034US1	4243

			EXAMINER
24852	7590	09/01/2004	NGUYEN, CINDY

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ART UNIT	PAPER NUMBER
2171	

DATE MAILED: 09/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.		Applicant(s)	
Office Action Summary		10/090,068		GRUST ET AL.	
		Examiner		**Art Unit**	
		Cindy Nguyen		2171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 March 2002</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-33</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>08 May 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>03/01/02</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

This is in response to application filed on 03/01/02 in which claims 1-33 are presented for examination.

1.   *Information Disclosure Statement*

The information disclosure statement filed on 03/01/02 is in compliance with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. Because it has been placed in the application file, and the information referred to therein has been considered as to the merits.

2.   *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-3, 6, 9-11, 14-16, 1921, 24-26 and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Chinnici et al. (U.S 2002/0188616) (Chinnici).

Regarding claims 1, 9, 24 Chinnici discloses: A method of managing a relational database comprising:

a. receiving queries in a query language (the client submits these queries in an SQL format to a database engine for processing, page 3, 0037, Chinnici);

b. representing the queries in accordance with a declarative language paradigm (a

rowset is a database structure containing information that represents a row or multiple

row of a table of the database, page 3, 0038-0039, Chinnici);

c. converting the queries represented in a declarative language paradigm to an

imperative language queries (the application server then converts the SQL protocol

command or rowset changes to a programming language, page 3, 0038-0039, Chinnici);

and

d. executing the imperative language (execute the programming language, page

3, 0038-0039, Chinnici).

Regarding claim 6, Chinnici discloses: A method of managing a relational

database comprising:

a. receiving queries in a query language (the client submits these queries in an

SQL format to a database engine for processing, page 3, 0037, Chinnici);

b. converting the query language to an imperative language representation of a

declarative language representation of the queries in accordance with a declarative

language paradigm (the application server then converts the SQL protocol command or

rowset changes to a programming language, page 3, 0038-0039, Chinnici); and

c. executing the imperative language queries (executes the programming

language, page 3, 0038-0039, Chinnici).

Regarding claim 14, Chinnici discloses: A database management system adapted

to process queries in a pervasive computing environment, said pervasive computing

environment comprising at least one client (14, fig. 1, Chinnici) adapted to interact with

a server (20, fig. 1) over connection services, said at least one client controlled and

configured to

 a. receive queries in a query language (the client submits these queries in an SQL

format to a database engine for processing, page 3, 0037, Chinnici);

 b. represent the queries in accordance with a declarative language paradigm (a

rowset is a database structure containing information that represents a row or multiple

row of a table of the database, page 3, 0038-0039, Chinnici);

 c. convert the queries represented in a declarative language paradigm to an

imperative language (the application server then converts the SQL protocol command or

rowset changes to a programming language, page 3, 0038-0039, Chinnici); and

 d. execute the imperative language

queries (execute the programming language, page 3, 0038-0039, Chinnici).

 As per claim 19, all the limitations of these claims have been noted in the

rejection of claim 6 and 14. It is therefore rejected as set forth above.

 As per claims 24 and 29, it is the program product of claim 1 and 9, all the

limitations of these claims have been noted in the rejection of claim 6 and 14. It is

therefore rejected as set forth above.

 Regarding claims 2, 10, 15, 20, 25, 30 all the limitations of these claims have

been noted in the rejection of claims 1, 9, 14, 19, 24 and 29 above, respectively. In

addition, Chinnici discloses: comprising converting the query language to an

intermediate declarative representative (page 6, 0054, Chinnici), and thereafter

converting the query to an imperative language representation of the queries and

executing the imperative language queries (page 7, 0063, Chinnici).

Regarding claims 3, 11, 16, 21, 26, 31 all the limitations of these claims have

been noted in the rejection of claims 1, 9, 14, 19, 24 and 29 above, respectively. In

addition, Chinnici discloses: comprising converting the query language to an imperative

language representation of the declarative language and executing the imperative

language queries (page 3, 0038, Chinnici).

4.   Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section
> 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the
> subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill
> in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

5.   Claims 4, 7, 12, 17, 22, 27 and 32 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chinnici et al. (U.S 2002/0188616) (Chinnici) in view of Steele JR. et al.

(U.S 2001/0056420) (Steele).

Regarding claims 4, 7, 12, 17, 22, 27 and 32, all the limitations of these claims

have been noted in the rejection of claim 1, 6, 9, 14, 19, 24 and 29 above, respectively.

However, Chinnici didn't disclose: wherein the declarative language is chosen from the

group consisting of ML, LISP, and HASKELL. On the other hand, Steele discloses:

ML, LISP and HASKELL . Thus, at the time invention was made, it would have been

obvious to a person of ordinary skill in the art to include the ML, LISP, HASKELL in

the system of Chinnici as taught by Steele. The motivation being to enable system uses

declarative language (they can be ML, LISP, HASKELL or a like) due to programming

conventions for converting database record to correspond to the query request as

modified by the client computer system.

6.   Claims 5, 8, 13, 18, 23, 28 and 33 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chinnici et al. (U.S 2002/0188616) (Chinnici) in view of Agesen

(U.S 6711672).

Regarding claims 5, 8, 13, 18, 23, 28 and 33 all the limitations of this claim have

been noted in the rejection of claims 1, 6, 9, 14, 19, 24 and 29 above, respectively.

However, Chinnici didn't disclose: wherein the imperative language is chosen from the

group consisting of C, C++, Java, Modula2, and SmallTalk. On the other hand, Agesen

discloses: wherein the imperative language is chosen from the group consisting of C,

C++, Java, Modula2, and SmallTalk (col. 2, lines 34-49, Agesen). Thus, at the time

invention was made, it would have been obvious to a person of ordinary skill in the art

to include the C, C++, Java, Modula2, and SmallTalk in the system of Chinnici as taught

by Agesen. The motivation being to enable system uses high level programming

languages due to programming conventions for converting database record to

correspond to the query request as modified by the client computer system.

7.   *Contact Information*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Cindy Nguyen whose telephone number is 703-305-4698. The

examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-872-9306 for regular

communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-305-3900.

Cindy Nguyen

August 31, 2004

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